FRQs of APES

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| **All Questions** | [**1999**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_99.pdf) | [**2000**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_00.pdf) | [**2001**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_01.pdf) | [**2002**](http://apcentral.collegeboard.com/apc/public/repository/envir_sci_frq_02_10393.pdf) | [**2003**](http://apcentral.collegeboard.com/apc/public/repository/ap03_frq_environ_sci_23122.pdf) | [**2004**](http://apcentral.collegeboard.com/apc/public/repository/ap04_frq_environ_sci_36198.pdf) | [**2005**](http://apcentral.collegeboard.com/apc/public/repository/_ap05_frq_envir_sci_45691.pdf) | [**2006**](http://apcentral.collegeboard.com/apc/public/repository/_ap06_frq_environment_51791.pdf) | [**2007**](http://apcentral.collegeboard.com/apc/public/repository/ap07_envsci_frq.pdf) | [**2008**](http://apcentral.collegeboard.com/apc/public/repository/ap08_env_sci_frq.pdf) | [**2009**](http://apcentral.collegeboard.com/apc/public/repository/ap09_frq_environmental_science.pdf) | [**2010**](http://apcentral.collegeboard.com/apc/public/repository/ap10_frq_env_sci.pdf) | [**2011**](http://apcentral.collegeboard.com/apc/public/repository/ap11_frq_environmental_science.pdf) | [**2012**](http://apcentral.collegeboard.com/apc/public/repository/ap12_frq_envi_sci.pdf) | **2013** | **2014** | **2015** | **2016** |
| **Scoring Guidelines** | [**1999**](http://apcentral.collegeboard.com/apc/members/repository/sg_envir_sci_99.pdf) | [**2000**](http://apcentral.collegeboard.com/apc/members/repository/sg_envir_sci_00.pdf) | [**2001**](http://apcentral.collegeboard.com/apc/members/repository/sg_envir_sci_01.pdf) | [**2002**](http://apcentral.collegeboard.com/apc/public/repository/sg_envir_sci_02_11517.pdf) | [**2003**](http://apcentral.collegeboard.com/apc/members/repository/ap03_sg_environ_scien_26434.pdf) | [**2004**](http://apcentral.collegeboard.com/apc/public/repository/ap04_sg_environ_scien_36981.pdf) | [**2005**](http://apcentral.collegeboard.com/apc/public/repository/_ap05_sg_envir_sci_46586.pdf) | [**2006**](http://apcentral.collegeboard.com/apc/public/repository/_ap06_envsci_sg.pdf) | [**2007**](http://apcentral.collegeboard.com/apc/public/repository/_ap07_env_sci_sgs_final.pdf) | [**2008**](http://apcentral.collegeboard.com/apc/public/repository/ap08_env_sci_sgs.pdf) | [**2009**](http://apcentral.collegeboard.com/apc/public/repository/ap09_env_sci_sgs.pdf) | [**2010**](http://apcentral.collegeboard.com/apc/public/repository/ap10_envi_sci_scoring_guidelines.pdf) | [**2011**](http://apcentral.collegeboard.com/apc/public/repository/ap11_env_sci_scoring_guidelines.pdf) | **2012** | **2013** | **2014** | **2015** | **2016** |
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| Earth Systems |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Concepts |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Atmosphere |  |  |  | **4** |  | **1** |  |  | **3 4** | **3** | **1** | **4** |  |  |  |  |  |  |
| Water Resources & Use | **1** |  |  | **2** | **3** |  |  |  | **1 2 4** |  | **3** |  |  |  |  |  |  |  |
| Soil & Soil Dynamics |  |  |  |  | **1** | **4** |  |  |  |  |  |  |  |  | **2** |  |  |  |
| Living World |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ecosystem | **1** | **3** | **2** |  | **1 3 4** |  | **4** |  |  | **3** |  |  | **1** | **4** |  |  |  |  |
| Energy Flow |  |  | **2** |  | **1** | **1** |  |  |  |  |  |  |  |  |  |  |  |  |
| Ecosystem Diversity | **1** | **3** |  |  | **1 4** |  |  |  |  | **3** |  | **3** | **1 2** |  | **4** |  |  |  |
| Ecosystem Change |  | **3** |  |  | **1** |  |  |  |  |  |  |  |  |  |  | **3** | **1** |  |
| Biogeochemical |  |  |  |  | **1** |  |  |  |  |  | **1** |  |  |  | **1** | **4** | **1** |  |
| Population | [**1999**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_99.pdf) | [**2000**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_00.pdf) | [**2001**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_01.pdf) | [**2002**](http://apcentral.collegeboard.com/apc/public/repository/envir_sci_frq_02_10393.pdf) | [**2003**](http://apcentral.collegeboard.com/apc/public/repository/ap03_frq_environ_sci_23122.pdf) | [**2004**](http://apcentral.collegeboard.com/apc/public/repository/ap04_frq_environ_sci_36198.pdf) | [**2005**](http://apcentral.collegeboard.com/apc/public/repository/_ap05_frq_envir_sci_45691.pdf) | [**2006**](http://apcentral.collegeboard.com/apc/public/repository/_ap06_frq_environment_51791.pdf) | [**2007**](http://apcentral.collegeboard.com/apc/public/repository/ap07_envsci_frq.pdf) | [**2008**](http://apcentral.collegeboard.com/apc/public/repository/ap08_env_sci_frq.pdf) | [**2009**](http://apcentral.collegeboard.com/apc/public/repository/ap09_frq_environmental_science.pdf) | [**2010**](http://apcentral.collegeboard.com/apc/public/repository/ap10_frq_env_sci.pdf) | [**2011**](http://apcentral.collegeboard.com/apc/public/repository/ap11_frq_environmental_science.pdf) | [**2012**](http://apcentral.collegeboard.com/apc/public/repository/ap12_frq_envi_sci.pdf) | **2013** | **2014** | **2015** | **2016** |
| Concepts |  |  |  |  | **2 4** |  |  |  |  | **4** |  |  |  |  |  |  |  |  |
| Human Population | **2 3** | **2** |  | **3 4** | **2 4** |  | **1 2** |  | **4** | **4** |  |  |  |  |  |  |  |  |
| Land and Water Use |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Agriculture | **4** |  | **2 4** | **2** | **1 4** | **4** | **2** |  |  | **1** | **4 2** |  | **4** | **3** | **1** |  | **4** |  |
| Forestry |  |  |  |  | **1** | **4** |  |  |  | **3** |  | **2** |  |  |  |  |  |  |
| Rangelands |  |  | **4** |  |  | **4** | **2** |  |  |  |  |  |  |  |  |  |  |  |
| Other Land Use |  | **3** |  | **2** | **3 4** | **4** | **4** | **3** | **4** |  |  |  |  |  |  |  | **4** |  |
| Mining |  |  |  |  |  | **1** | **3 4** |  |  |  |  |  |  |  |  |  |  |  |
| Fishing |  |  |  | **2 4** | **3** |  |  | **4** |  |  |  |  |  |  |  |  |  |  |
| Global Economics |  |  |  | **2** |  |  | **4** | **4** |  |  |  |  |  |  |  |  |  |  |
| Energy Resources | [**1999**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_99.pdf) | [**2000**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_00.pdf) | [**2001**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_01.pdf) | [**2002**](http://apcentral.collegeboard.com/apc/public/repository/envir_sci_frq_02_10393.pdf) | [**2003**](http://apcentral.collegeboard.com/apc/public/repository/ap03_frq_environ_sci_23122.pdf) | [**2004**](http://apcentral.collegeboard.com/apc/public/repository/ap04_frq_environ_sci_36198.pdf) | [**2005**](http://apcentral.collegeboard.com/apc/public/repository/_ap05_frq_envir_sci_45691.pdf) | [**2006**](http://apcentral.collegeboard.com/apc/public/repository/_ap06_frq_environment_51791.pdf) | [**2007**](http://apcentral.collegeboard.com/apc/public/repository/ap07_envsci_frq.pdf) | [**2008**](http://apcentral.collegeboard.com/apc/public/repository/ap08_env_sci_frq.pdf) | [**2009**](http://apcentral.collegeboard.com/apc/public/repository/ap09_frq_environmental_science.pdf) | [**2010**](http://apcentral.collegeboard.com/apc/public/repository/ap10_frq_env_sci.pdf) | [**2011**](http://apcentral.collegeboard.com/apc/public/repository/ap11_frq_environmental_science.pdf) | [**2012**](http://apcentral.collegeboard.com/apc/public/repository/ap12_frq_envi_sci.pdf) | **2013** | **2014** | **2015** | **2016** |
| Concepts |  | **1** | **1** | **1** |  | **2** |  | **1** |  |  | **2** |  |  |  |  |  |  |  |
| Consumption | **3** | **1** | **1** | **1** |  | **2** | **3 4** | **1** |  |  | **2** |  |  |  |  |  |  |  |
| Fossil Fuel Resources & Use | **3** | **1** | **1** | **1** |  | **1 2** | **3 4** |  |  |  |  | **1** | **3** | **1** |  |  | **3** |  |
| Nuclear Energy |  |  |  | **1** |  | **3** |  |  |  |  |  |  |  | **1** |  | **1** |  |  |
| Hydroelectric Power |  |  |  | **1 2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Energy Conservation |  |  | **1** | **1** |  | **1 2** |  | **1** | **2** | **1** |  |  |  |  |  | **1** |  |  |
| Renewable Energy |  |  |  |  |  | **2** |  | **1** |  | **1** |  |  | **3** | **2** | **2** |  |  |  |
| Pollution | [**1999**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_99.pdf) | [**2000**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_00.pdf) | [**2001**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_01.pdf) | [**2002**](http://apcentral.collegeboard.com/apc/public/repository/envir_sci_frq_02_10393.pdf) | [**2003**](http://apcentral.collegeboard.com/apc/public/repository/ap03_frq_environ_sci_23122.pdf) | [**2004**](http://apcentral.collegeboard.com/apc/public/repository/ap04_frq_environ_sci_36198.pdf) | [**2005**](http://apcentral.collegeboard.com/apc/public/repository/_ap05_frq_envir_sci_45691.pdf) | [**2006**](http://apcentral.collegeboard.com/apc/public/repository/_ap06_frq_environment_51791.pdf) | [**2007**](http://apcentral.collegeboard.com/apc/public/repository/ap07_envsci_frq.pdf) | [**2008**](http://apcentral.collegeboard.com/apc/public/repository/ap08_env_sci_frq.pdf) | [**2009**](http://apcentral.collegeboard.com/apc/public/repository/ap09_frq_environmental_science.pdf) | [**2010**](http://apcentral.collegeboard.com/apc/public/repository/ap10_frq_env_sci.pdf) | [**2011**](http://apcentral.collegeboard.com/apc/public/repository/ap11_frq_environmental_science.pdf) | [**2012**](http://apcentral.collegeboard.com/apc/public/repository/ap12_frq_envi_sci.pdf) | **2013** | **2014** | **2015** | **2016** |
| Types | **2** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Air | **3** | **1** | **1 3** | **1** |  | **1** |  |  | **3 4** | **3** | **1** | **1 2** |  |  | **3** |  |  |  |
| Noise |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Water | **1** |  | **4** | **2** |  | **1** |  |  | **1 2** | **2** |  |  |  | **4** |  | **2** | **1 3** |  |
| Solid Waste |  | **2** |  |  |  | **3** |  | **3** | **1** | **2** |  |  |  |  |  |  |  |  |
| Impacts on Environment & Health | **3 4** | **1** | **1 3 4** | **3 4** |  | **1 2 3** |  | **3** |  | **2** |  | **1** |  | **3** |  |  | **2** |  |
| Economic Impacts |  |  |  |  |  |  |  | **3** |  |  |  | **1** |  |  |  |  |  |  |
| Global Change | [**1999**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_99.pdf) | [**2000**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_00.pdf) | [**2001**](http://apcentral.collegeboard.com/apc/members/repository/envir_sci_01.pdf) | [**2002**](http://apcentral.collegeboard.com/apc/public/repository/envir_sci_frq_02_10393.pdf) | [**2003**](http://apcentral.collegeboard.com/apc/public/repository/ap03_frq_environ_sci_23122.pdf) | [**2004**](http://apcentral.collegeboard.com/apc/public/repository/ap04_frq_environ_sci_36198.pdf) | [**2005**](http://apcentral.collegeboard.com/apc/public/repository/_ap05_frq_envir_sci_45691.pdf) | [**2006**](http://apcentral.collegeboard.com/apc/public/repository/_ap06_frq_environment_51791.pdf) | [**2007**](http://apcentral.collegeboard.com/apc/public/repository/ap07_envsci_frq.pdf) | [**2008**](http://apcentral.collegeboard.com/apc/public/repository/ap08_env_sci_frq.pdf) | [**2009**](http://apcentral.collegeboard.com/apc/public/repository/ap09_frq_environmental_science.pdf) | [**2010**](http://apcentral.collegeboard.com/apc/public/repository/ap10_frq_env_sci.pdf) | [**2011**](http://apcentral.collegeboard.com/apc/public/repository/ap11_frq_environmental_science.pdf) | [**2012**](http://apcentral.collegeboard.com/apc/public/repository/ap12_frq_envi_sci.pdf) | **2013** | **2014** | **2015** | **2016** |
| Stratospheric Ozone |  |  |  |  |  |  |  |  | **3** |  |  |  |  |  | **3** |  |  |  |
| Global Warming |  | **1** | **1** |  |  |  | **1 3** | **2** |  | **1, 3** | **3** | **2 4** | **1 2** |  | **2** | **4** | **1** |  |
| Biodiversity Loss | **4** |  |  | **2** | **4** |  | **4** |  |  | **3** |  |  |  | **2** | **4** |  |  |  |
| Experimental Design | **1** |  | **2** | **3** | **1** |  |  |  |  |  |  |  | **1** | **3** | **4** |  |  |  |
| Math/Graph |  |  | **1** | **1 3** | **2** | **2** | **2 4** | **2 4** | **2** | **1 2 4** | **124** | **2** | **123** | **2** | **2** | **2** | **234** |  |

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| 2015 | **Mobile devices/ewaste** | **Water quality: Everglades** | **Oil spills/oil substitute** | **Urban sprawl** |
| 2014 | **Sewer/stormwater** | **Nuclear** | **Ring Of Fire/tsunamis** | **Biogeochemical cycles** |
| 2013 | **Elec Cars** | **Gulf of Mexico Oil Spill** | **Ozone loss** | **Biodiversity Loss** |
| 2012 | **Fracking** | **Freemont Alternate Fuel** | **Pesticides** | **Wetlands** |
| 2011 | **Beetles & Bees** | **Coral Reefs** | **GDP v Electrical Use** | **Arable Land** |
| 2010 | **Deadly Pollutants** | **Termites** | **Invasive Species** | **Sea Level** |
| 2009 | **Nitrogen Smog** | **Methane digesters** | **Colorado River water** | **Genetically modified (GM) crops** |
| 2008 | **Microalgae Fuel** | **Fremont Landfill Leachate** | **Forest Fire Initiative** | **Graph of Human Population** |
| 2007 | **Fremont Sewage** | **Family Water and Energy Saving** | **Stratospheric Ozone** | **Urban Population Boom** |
| 2006 | **Photovoltaic** | **Greenhouse Gases** | **Fremont Brownfield** | **George's Bank Fish Catch** |
| 2005 | **Disease on the Rise** | **Infectious Diseases on the Rise** | **Coal Mined in US** | **ANWR** |
| 2004 | **Mercury & Seafood** | **W Fremont Wind Turbine** | **Radioactivity Disposal** | **Soil Samples** |
| 2003 | **Worm Invasive** | **Indonesia Population** | **Estuary Daily Variety** | **Whooping Crane & CA Condor** |
| 2002 | **Electric Cars** | **Colorado River** | **LD50 Copper Sulfate** | **El Nino and Disease** |
| 2001 | **Midwest NG Home** | **Oak Tree and Ticks** | **Indoor Air Pollution** | **Fremont Farm Water Pollution** |
| 2000 | **Coal Powered Plant** | **Recycling** | **Sparrow, Pigeon, Mammoth** | **Age Pyramid** |
| 1999 | **Ponds & Worms** | **Long-Term Resource Management** | **Air Pollution Chart** | **Pesticide Use in Ag** |
|  |  |  |  |  |
|  | **MATH** | **DBQ** | **Lab Design and or FRQ** | **FRQ** |